Swanson Reservoir
2010 Survey Summary

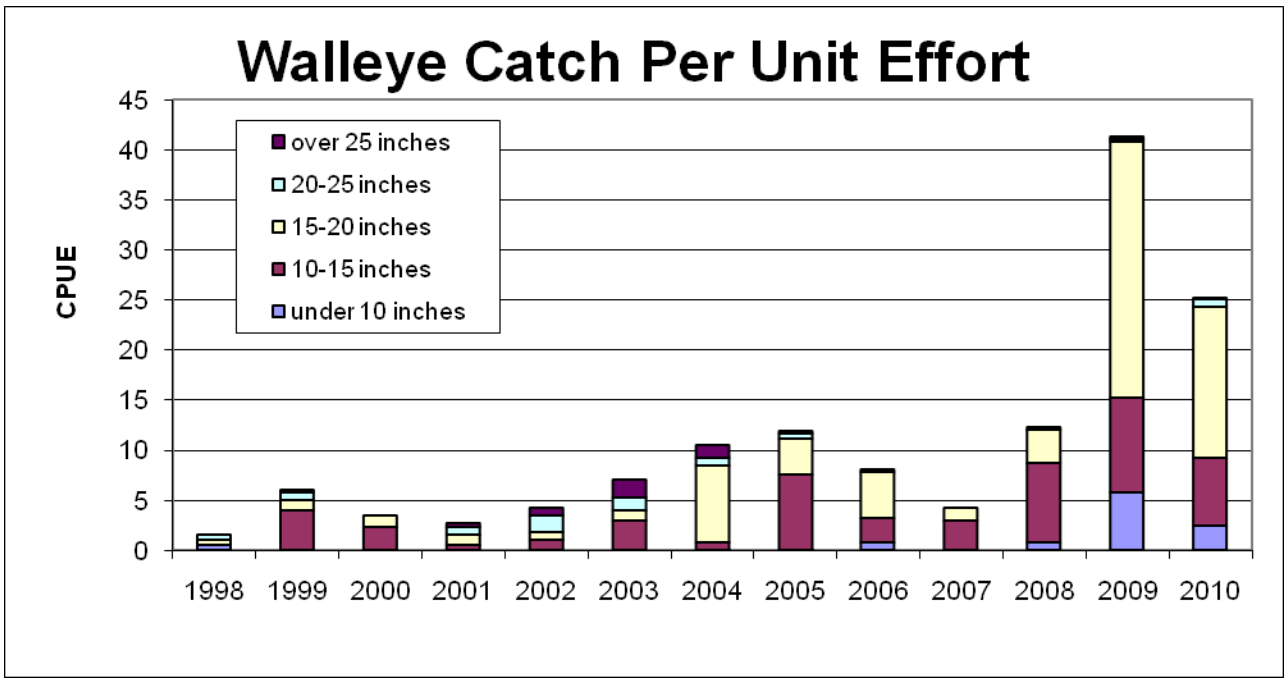
Nebraska Game and Parks Commission Caleb Huber, Fisheries Biologist

Swanson reservoir continues to produce good numbers of walleye. In 2009, biologists caught approximately 41 fish per net but those numbers declined to 25 fish per net in 2010. Even though numbers were down in 2010, over half of the walleyes sampled were greater than 15 inches. Swanson has been part of a walleye fry stocking evaluation that began in 2005. So far results have been somewhat sporadic across the Southwest reservoirs, but generally suggest that walleye fry stockings are working well in Swanson. Fry stocking is not the answer for all waterbodies, but may lead to increased walleye recruitment for some reservoirs. Increased water levels and the resulting submerged vegetation also provided good habitat for juvenile and adult fish of all species.

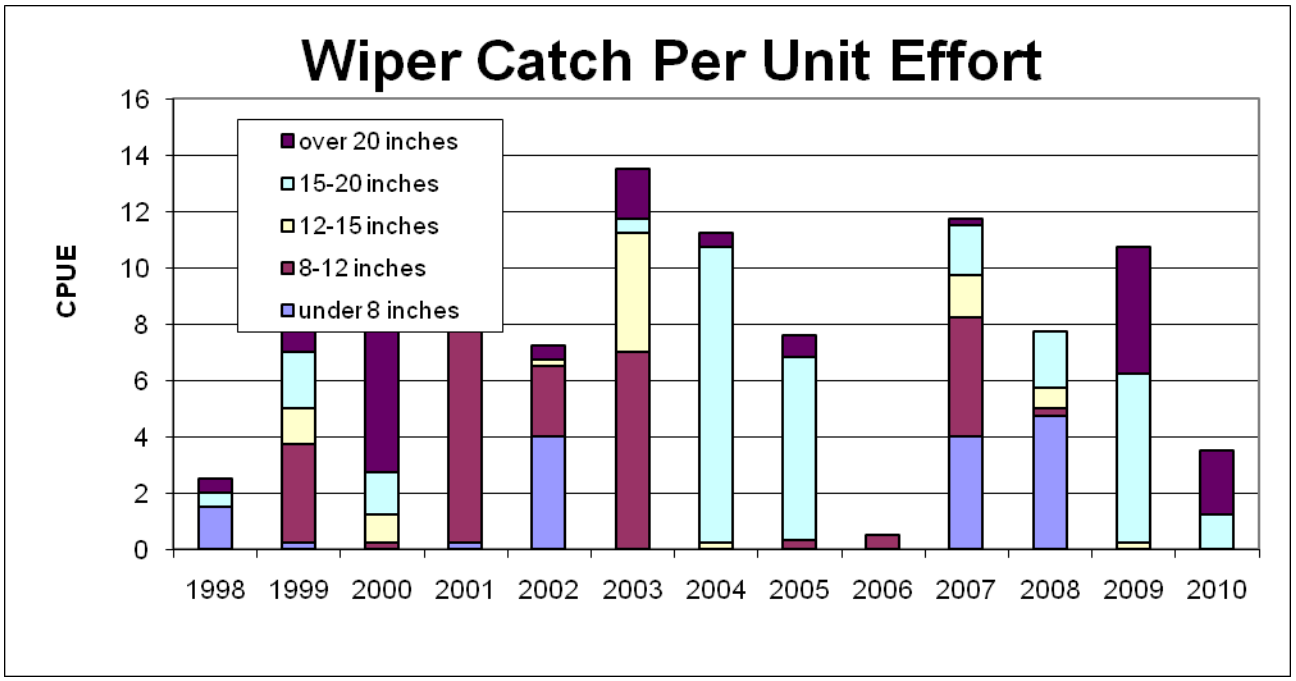
Overall, channel catfish from Swanson ranked near the bottom among Southwest reservoirs with overall catch rates at 3 fish per net. This may be due, in part, to the introduction of blue catfish in 2008 and decreased stocking rates of channel catfish. Blue catfish should do well at Swanson because of the warmer water temperature and abundant shad population. Blue cats are different from channel catfish in several ways. They are more likely to feed in the water column and prefer live bait over prepared catfish baits or dead shad. Blue catfish have a pronounced hump on their backs and a straight anal fin and lack the spots of channel catfish. Channel catfish have a rounded anal fin, may or may not have spots, and lack a pronounced hump. Blue catfish are also able to grow to impressive size and hopefully will provide an unique fishery in Southwest Nebraska. The bag limit for blue catfish is 1 fish per day and 2 fish in possession. Catfish anglers do well throughout the reservoir, and many fish are caught from underwater humps and near the dam and while drifting in the southwest part of the reservoir. Anglers are encouraged to practice catch-and-release for larger channel catfish , blue catfish, and flathead catfish due to their slow growth rates and trophy status.

White bass numbers have leveled out somewhat, but were still well above normal catch rates. There has been consistent white bass recruitment likely due to increased spring inflow. In 2010, the majority of fish sampled were less than 9 inches which means we should have fish available for the next few years. Beginning in 2009 wiper stockings were reduced. This reduction was based on data obtained from angler surveys which revealed low demand for wipers. Wipers have been maintained in order to provide trophy opportunities and diversity for anglers. NGPC biologists will monitor the fishery and adjust stocking rates of white bass and wipers as needed to maintain fishable populations, but with more emphasis placed on white bass management.

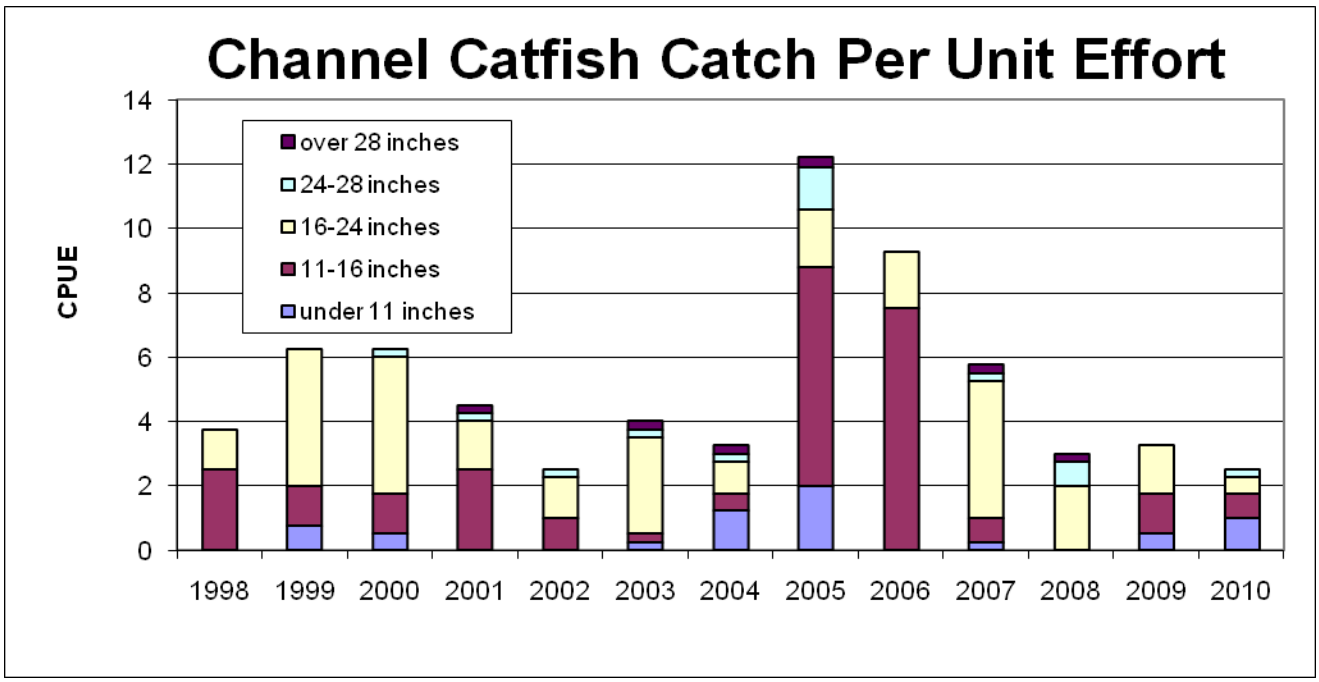
The following graphs show the average number of fish caught per net and the relative abundance of fish within several length categories. The text provides a brief explanation of the information shown in the graphs. Also included are graphs illustrating water level elevations and the resulting surface acres of water in Swanson Reservoir. Graphs summarizing historic and recent angler survey data are also included.



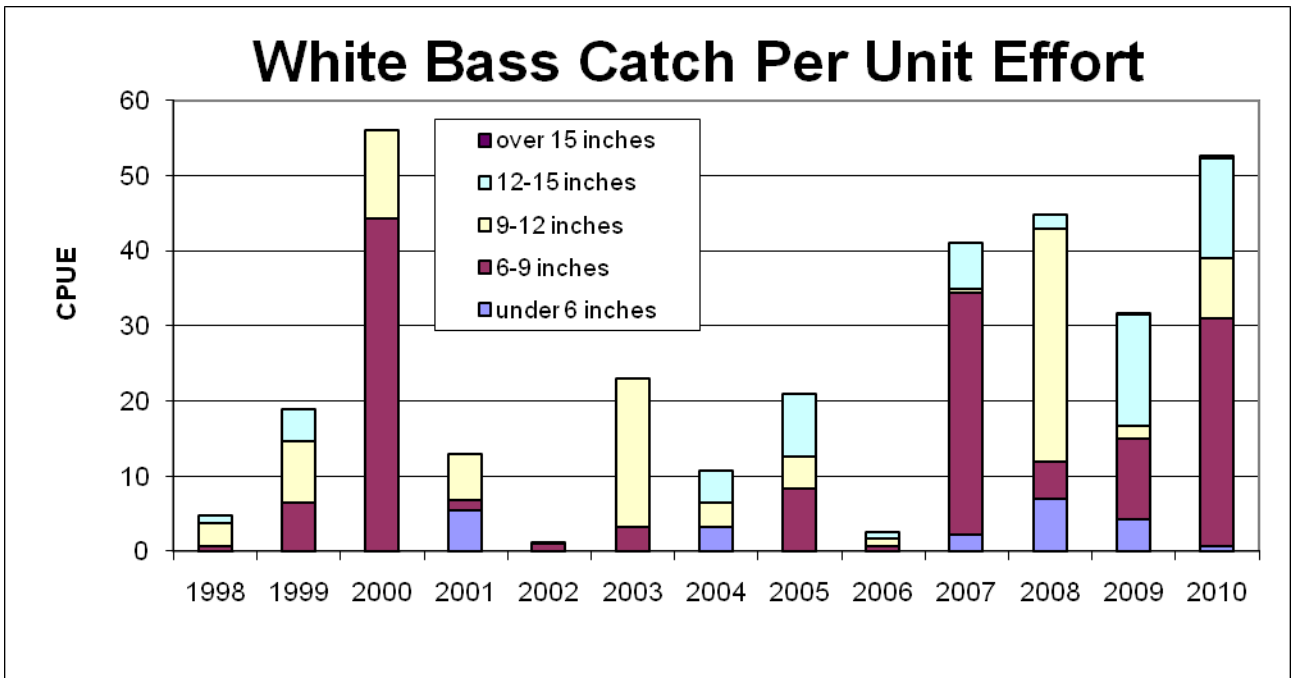
Walleye numbers declined a bit from the 2009 survey but were still outstanding. This drop was most likely due to increased harvest and increased lake levels in 2010. There should continue to be adequate fishing opportunities of harvestable fish during the 2011 season.



Wiper numbers have been variable at Swanson for several years. Wiper stockings have been reduced at Swanson due to increased walleye and white bass catches and minimal angler effort directed at wipers as indicated by creel data. Currently, there are still some wipers in the system and those remaining fish are large and should provide the occasional trophy opportunity.

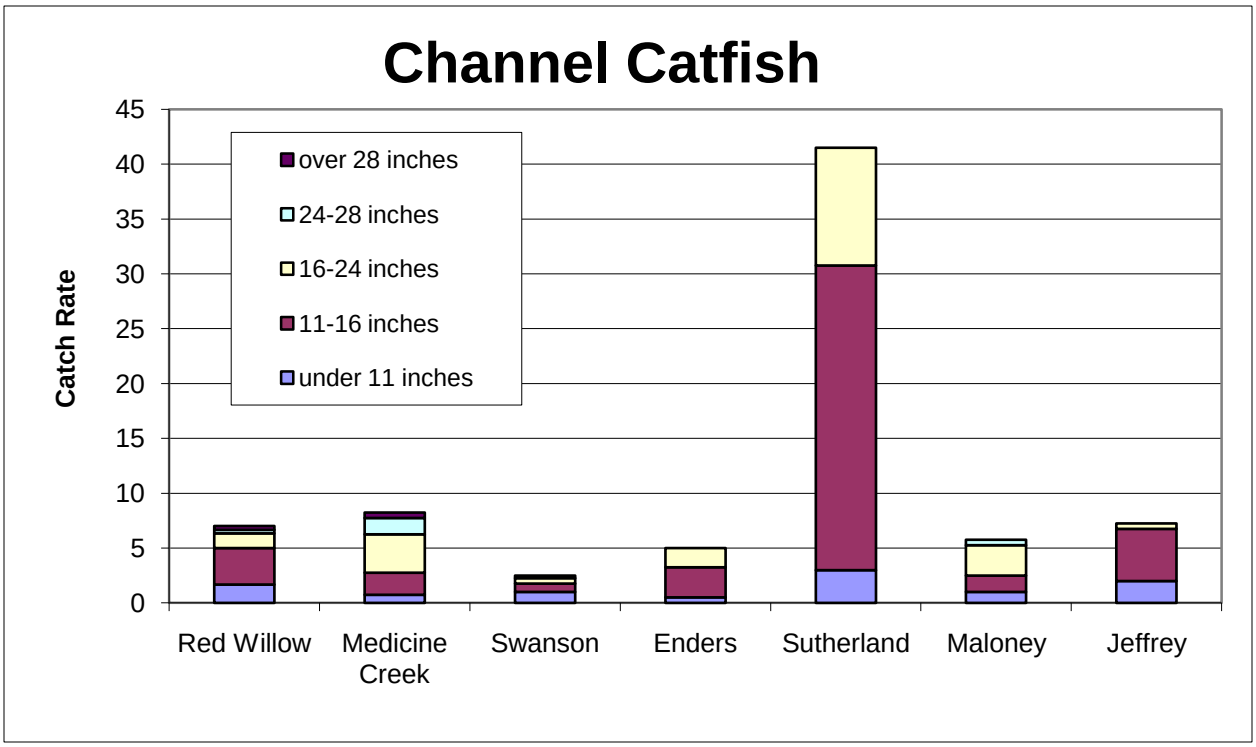


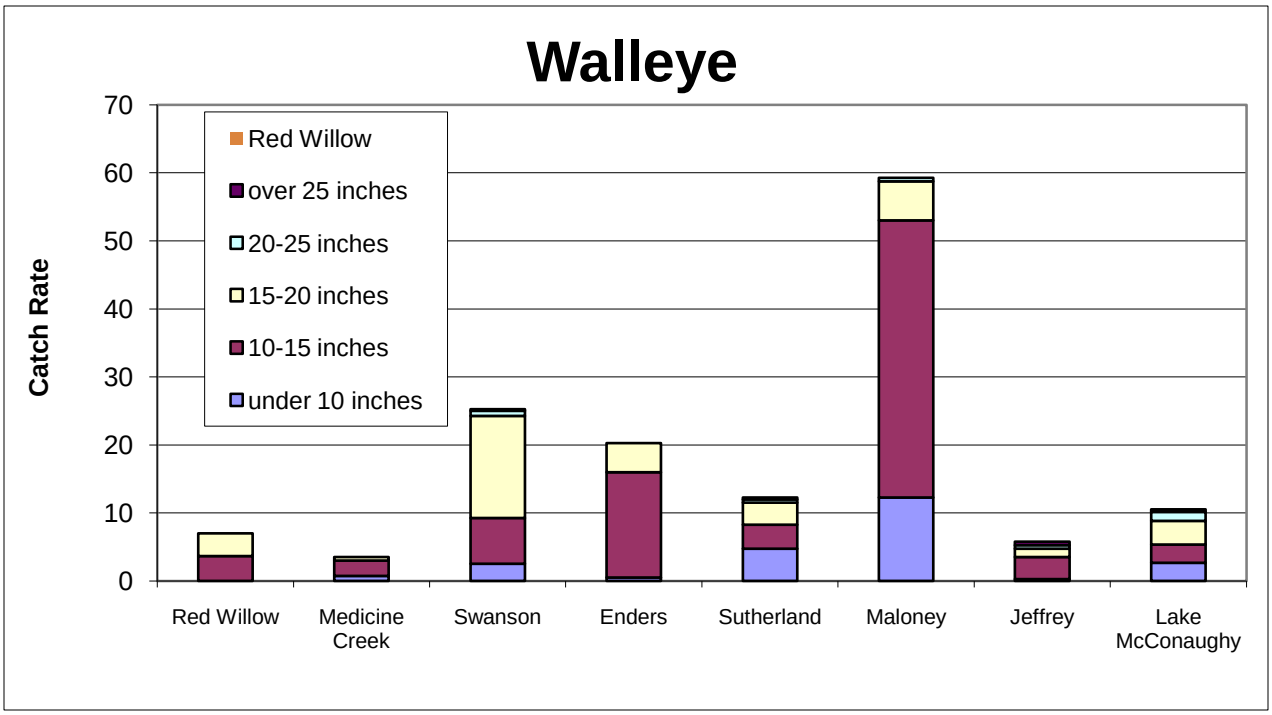
Channel catfish numbers seem to have stabilized from the sharp declines that began in 2006. Catch rates in 2010 were still relatively low at 2.5 fish per net. Approximately 15,000 channel catfish were stocked in 2010. Natural production should also improve as a result of increased river inflows. We are in the process of establishing a blue catfish fishery at Swanson reservoir. Blue catfish were stocked in 2009 and are scheduled to be stocked again in 2011.

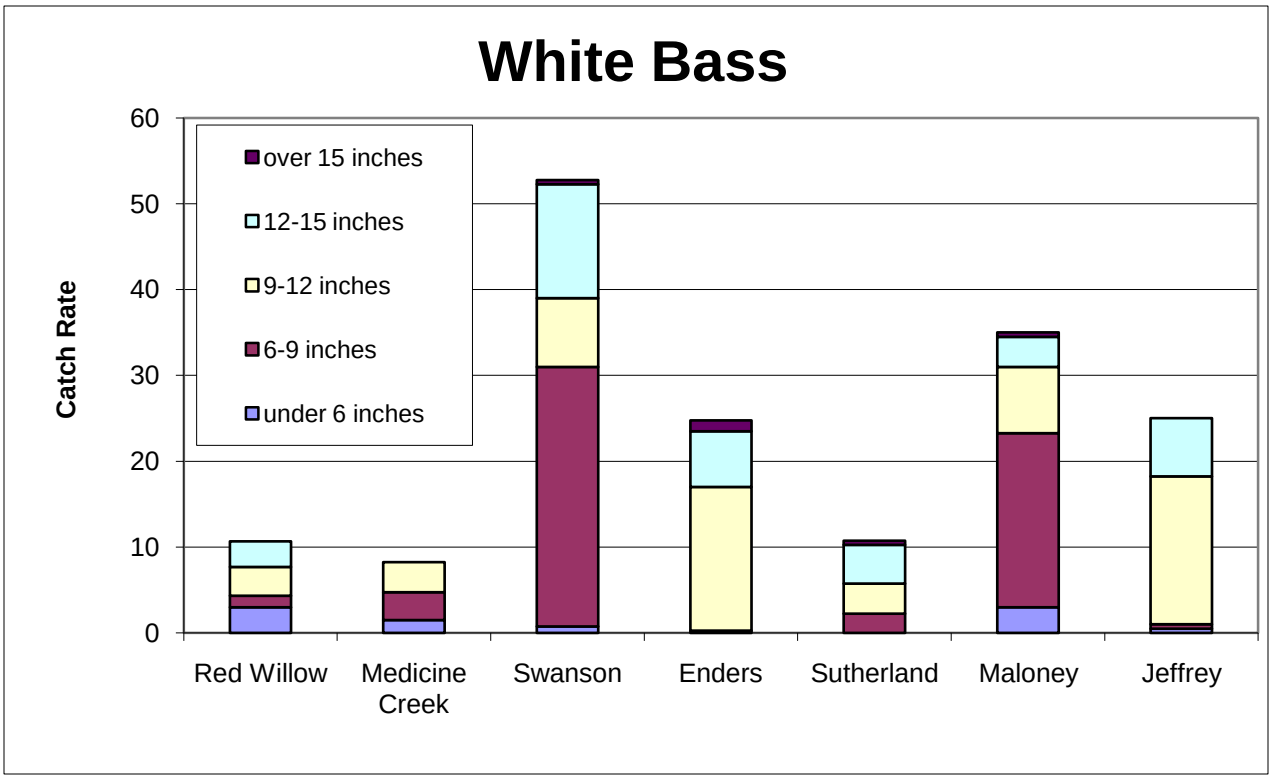


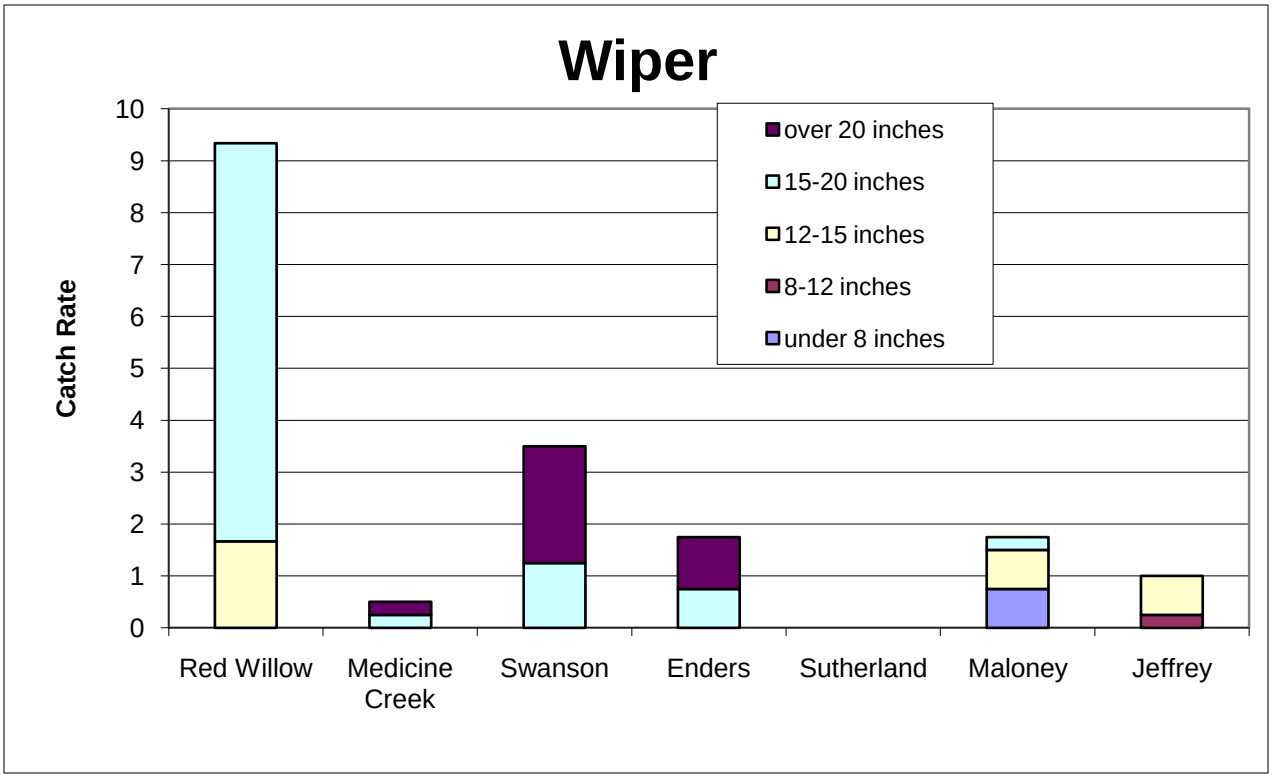
The 2010 white bass sample at Swanson was outstanding. Beginning in 2007 there has been a boom in white bass numbers. This likely has been due to increased lake levels and inflows. In 2010 biologists averaged approximately 52 fish per net. There were good numbers of 6-9-inch fish as well as plenty of larger fish available. These fish should continue to grow and provide good angling opportunities for several years.

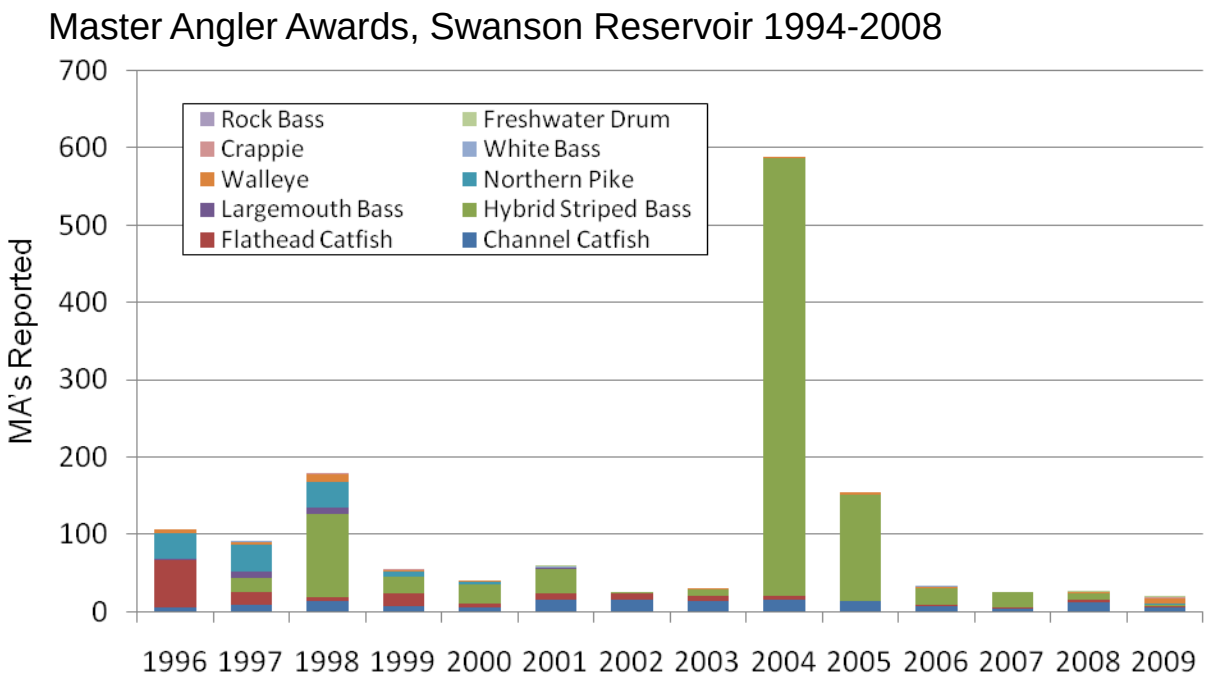
The following graphs compare 2010 walleye, white bass, wiper and channel catfish gill net catch rates between Southwest District reservoirs.



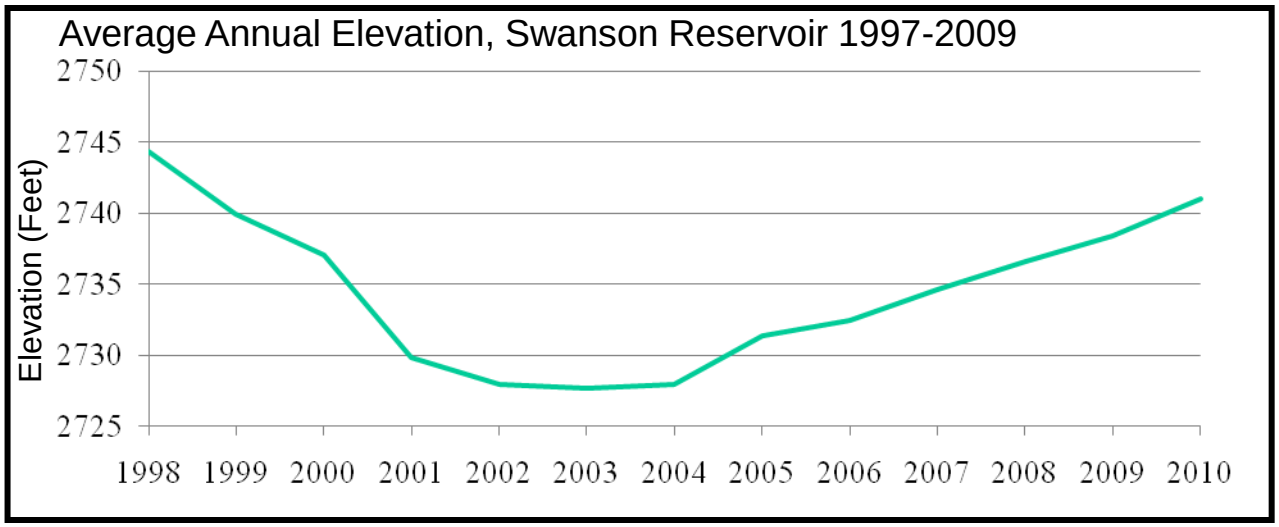



White Bass
Catch Rate
60
50
40
30
20
10
0
over 15 inches
12-15 inches
9-12 inches
6-9 inches
under 6 inches
Red Willow
Medicine Creek
Swanson
Enders
Sutherland
Maloney
Jeffrey

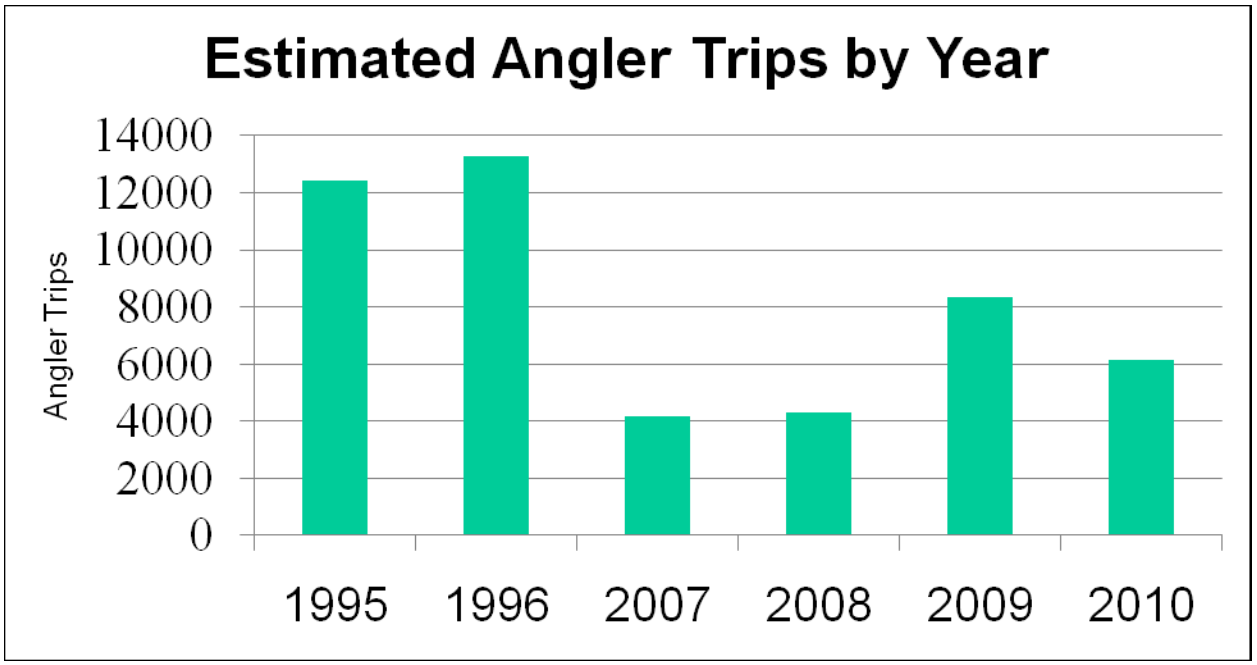

Wiper
Catch Rate
10
9
8
7
6
5
4
3
2
1
0
over 20 inches
15-20 inches
12-15 inches
8-12 inches
under 8 inches
Red Willow
Medicine Creek
Swanson
Enders
Sutherland
Maloney
Jeffrey



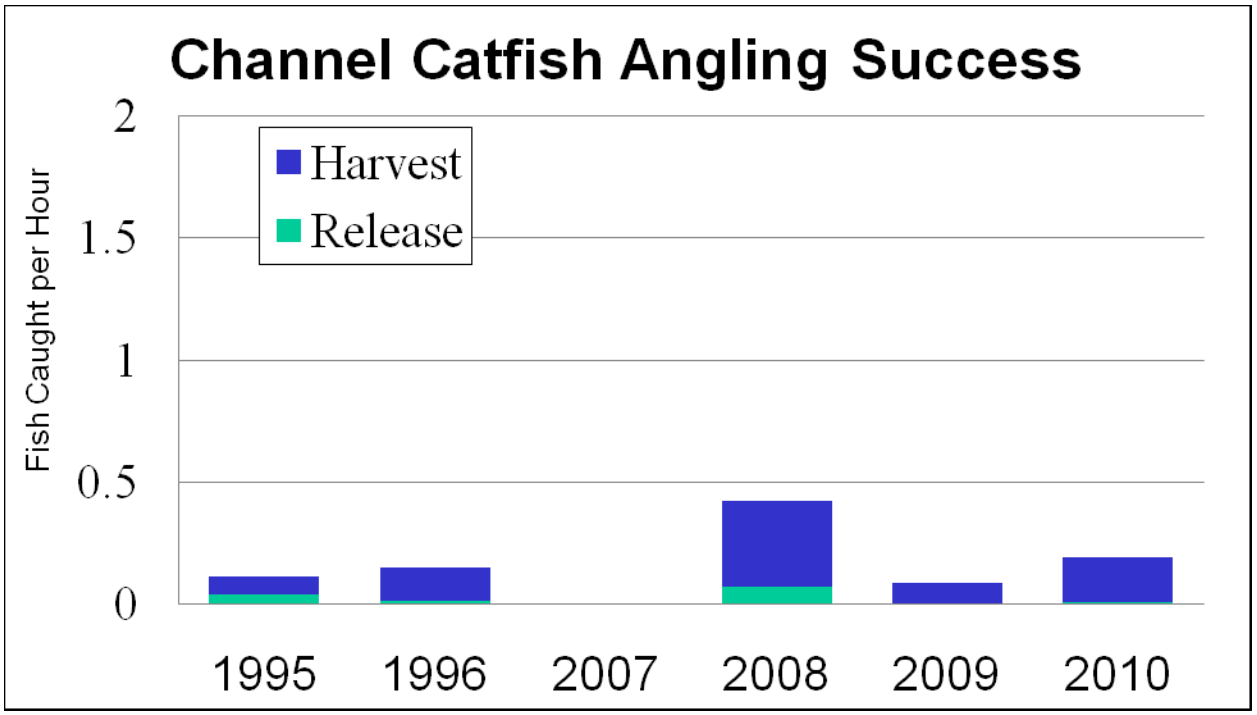
While the numbers of Master Angler (M.A.) awards given may not necessarily represent the true number of large fish caught (but not reported), the information can be useful for evaluating catch trends. Channel catfish and flathead catfish M.A. numbers remained similar to previous years. There was a huge increase in the numbers of M.A. wipers reported in 2004, but those numbers have returned to more average levels. There were 12 channel catfish, 4 flathead catfish, 1 crappie, 2 walleye, and 7 wipers submitted for M.A. awards in 2008.



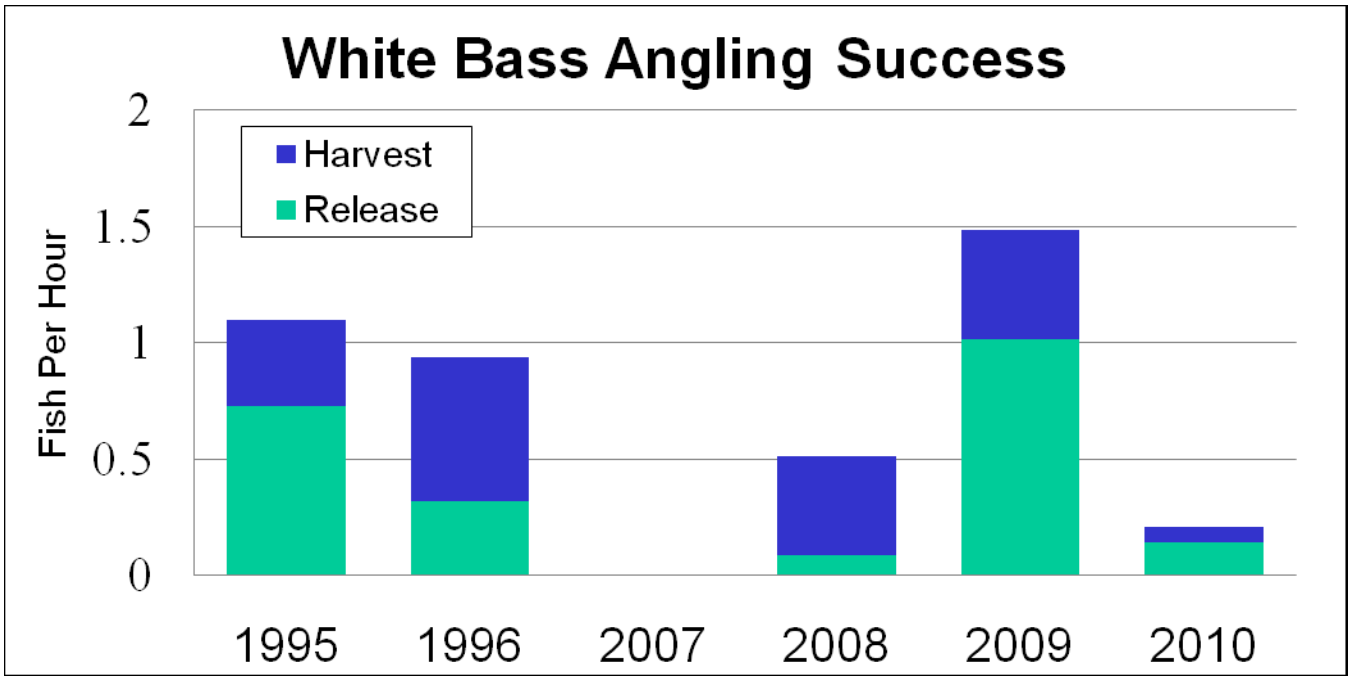
Water levels at Swanson have been recovering since bottoming out in the early 2000's. This recovery has provided many acres of submerged cover which has made shoreline angling and access more difficult. However, the recovery is the primary reason for fishery improvements at Swanson.



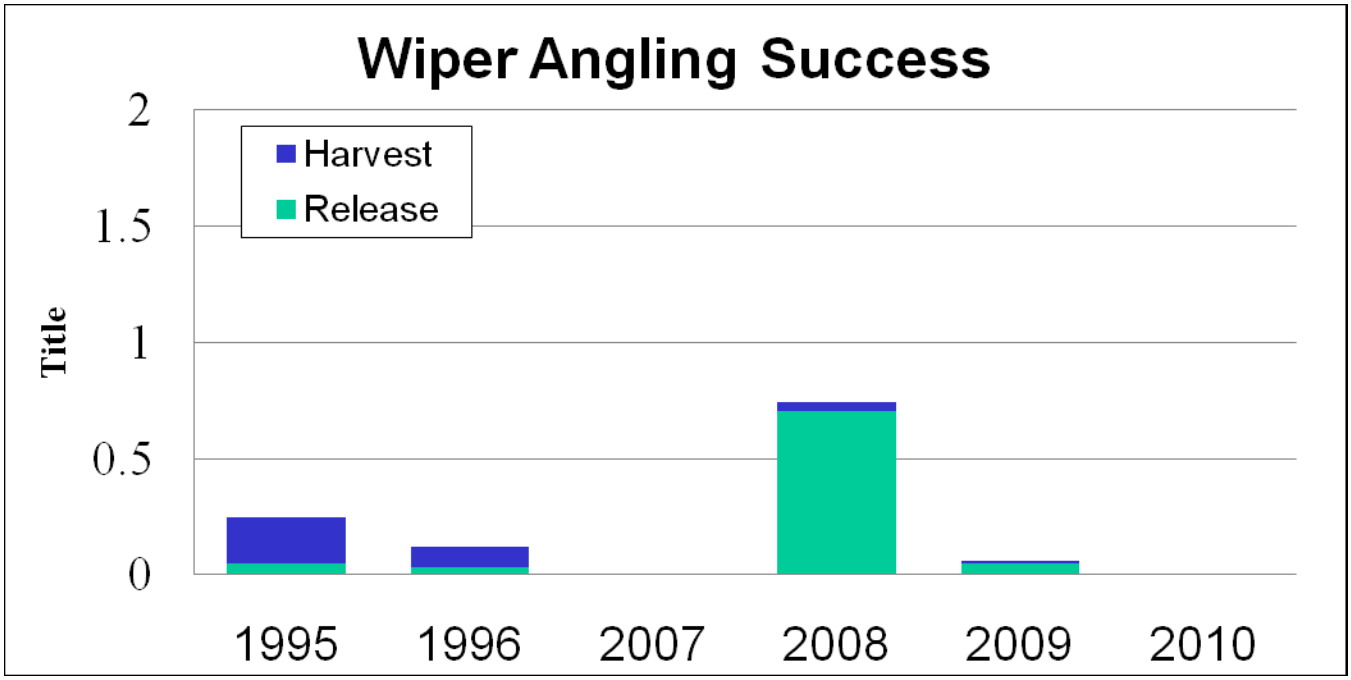
This graph depicts the estimated number of anglers at Swanson Reservoir from the beginning of April through October. Angler trips can be highly variable and may change from year to year depending on the quality of the fishing. Overall, visitation has been down in recent years when compared to data from the mid '90's.



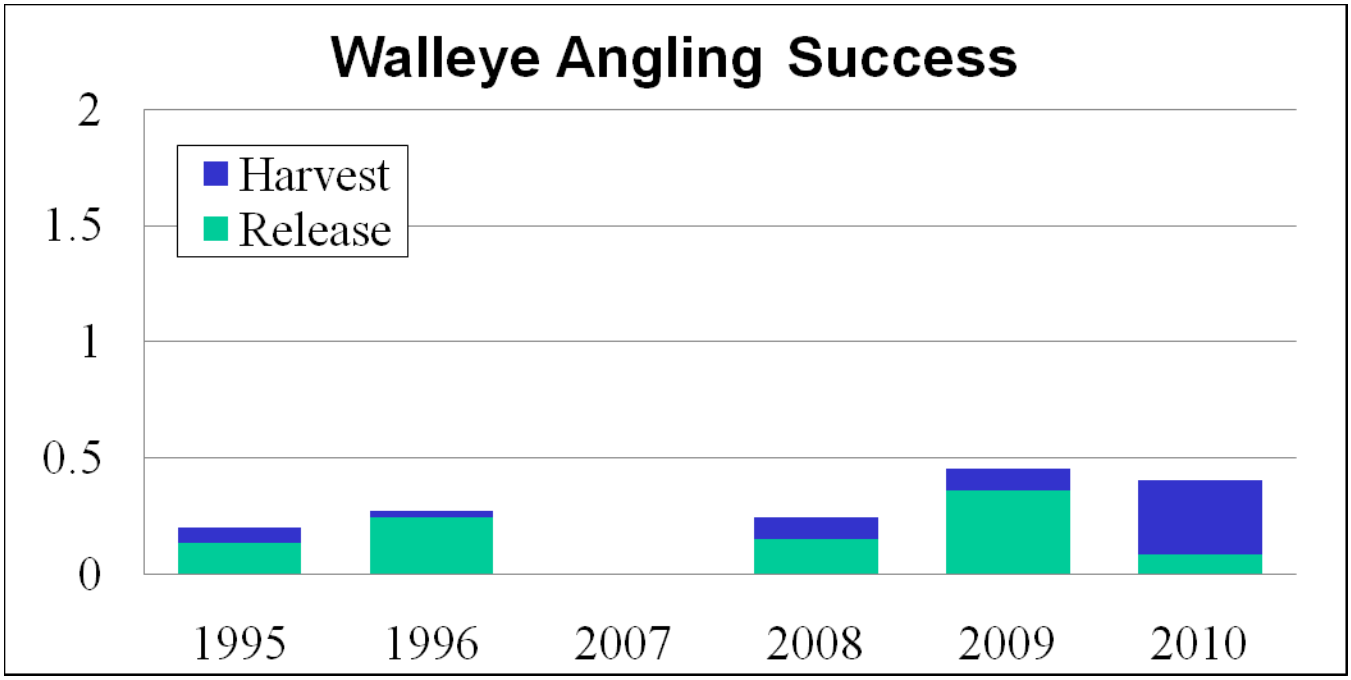
Catfish angling success was measured as the number of channel catfish caught per hour by anglers identifying themselves as channel catfish anglers. A catch rate of 0.25 fish per hour is about average. Another way to look at this is if the catch rate is 0.25 per hour, then approximately 1 channel catfish was caught per 4 angler-hours of effort.



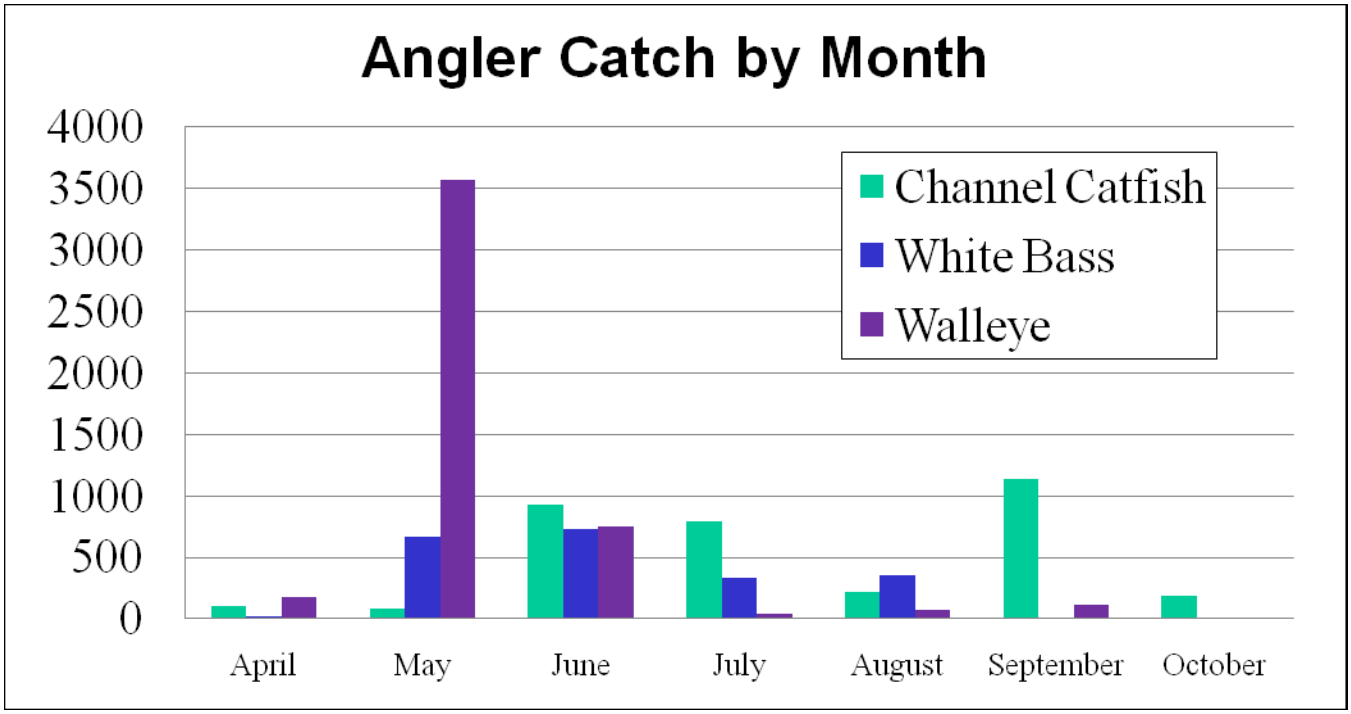
White bass angling success was measured as the number of white bass caught per hour by anglers identifying themselves as white bass anglers. A catch rate of 0.25 fish per hour is about average and that means that 1 white bass required 4 angler-hours of effort. Angler catch of white bass is usually variable due to fluctuating fish populations and because few anglers target white bass.



Wiper angling success was measured as the number of wiper caught per hour by anglers identifying themselves as wiper anglers. A catch rate of 0.25 fish per hour is about average and that means that 1 wiper required 4 angler-hours of effort. Angler catch of wipers is usually very low because few anglers indentify themselves as wiper anglers and it is difficult for many anglers to properly identify small- to medium-size wipers.



Walleye angling success was measured as the number of walleyes caught per hour by anglers identifying themselves as walleye anglers. A catch rate of 0.25 fish per hour is about average and that means that 1 walleye required 4 angler-hours of effort. It is interesting to note that the number of fish harvested was greater than fish released in 2010.



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